Structure Type	Highway Alignment Across Bridge	Maximum Skew	Maximum Bridge Length	Maximum to Zero Point
Reinforced Concrete Slab	No Restrictions	No Restrictions	60 m*	30 m*
Structural Steel	Tangent Only**	30 deg***	75 m*	37.5 m
Prestressed Concrete	No Restrictions	30 deg***	90 m*	45.0 m

## Notes:

\* The maximum length indicated may be increased, subject to approval by the Design Division Chief, if a rational analysis of induced pile loads indicates that the piles are not overloaded. Two rational analysis methods are described in the Iowa Department of Transportation report, Pile Design and Tests for Integral Abutment Bridges.

See Section 67-1.03(03) for an alternative analysis in lieu of the above criteria.

- \*\* The horizontal alignment may be curved as long as curved beams are not used.
- \*\*\* A skew of greater than 30 deg but equal to or less than 45 deg will be permitted if the maximum bridge length does not exceed 45 m.

## **USE OF INTEGRAL END BENTS**

Figure 67-1A